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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
	10/774,576	VESTERINEN ET AL.			
Office Action Summary	Examiner	Art Unit			
	SIMON KING	4183			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w. - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	l. lely filed the mailing date of this communication. (35 U.S.C. § 133).			
Status					
Responsive to communication(s) filed on 10 Fe This action is FINAL. 2b) ☐ This Since this application is in condition for allowar closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro				
Disposition of Claims					
4) ☐ Claim(s) 1-29 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-29 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or Application Papers 9) ☐ The specification is objected to by the Examine 10) ☐ The drawing(s) filed on 10 February 2004 is/are	vn from consideration. r election requirement. r.	d to by the Examiner.			
Applicant may not request that any objection to the or Replacement drawing sheet(s) including the correction of the oath or declaration is objected to by the Extended to be a second or declaration.	drawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 8/17/2005.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	te			

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Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-4, 8, 9, 11, 15-18, 22, 23, 26 and 29 are rejected under 35 U.S.C. 102(e) as being anticipated by Cox et al. (US 2003/0099246 A1).

As for claim 1, Cox discloses a method (Title: method) for configuring addresses (Abstract: configure address) in a packet (page 1, paragraph 0002: packet) switched data communication system (Abstract: communication links), the method comprising: providing a logical network (page 1, paragraph 0002: Ethernet Network) with at least two network elements (Figure 1 and page 1, paragraph 0012-0014: Access Point 113, End point 112), a network element of the at least two network elements comprising at least one sub-element (Figure 1 and page 1, paragraph 0012: new router 104); configuring a temporary address for an interface of a sub-element of the at least one sub-element (page 2, paragraph 0017 and 0018: configure address prefix for interface on new router 104); retrieving an identifier of the network element (page 2, paragraph 0019: an address prefix is received); and defining an address for the interface of the

sub-element by including the identifier of the network element to the temporary address (page 2, paragraph 0018 and 0019).

As for claim 2, Cox discloses a method (Title: method), wherein the configuring step comprises configuring a local link layer address (page 1, paragraph 0011: IPv6 Media Access Control (MAC) address of the interface) for the interface of the sub-element (page 1, paragraph 0012: new router 104 communication interface).

As for claim 3, Cox discloses a method (Title: method), wherein the configuring step comprises configuring the temporary address for the interface (page 1, paragraph 0011: for IPv6, when no address prefix is available, the router automatically flag that interface as needing a new address prefix) of the sub-element based on hardware location information (page 1, paragraph 0011: MAC address provides the hardware location) in the network element.

As for claim 4, Cox discloses a method (Title: method), wherein the configuring step comprises configuring the temporary address for the interface (page 1, paragraph 0011: for IPv6, when no address prefix is available, the router automatically flag that interface as needing a new address prefix) of the sub-element based on a module identifier of the sub-element (page 1, paragraph 0011: existing unique numerical identifier for that interface).

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As for claim 8, Cox discloses a method (Title: method), wherein the retrieving step comprises retrieving the identifier of the network element using the temporary address as a unique address to carry out an automatic address resolution procedure locally in the network element (page 1, paragraph 0011).

As for claim 9, Cox discloses a method (Title: method), wherein the step of defining the address comprises defining a network layer address for the interface of the sub-element (page 1, paragraph 0011: IPv6 Media Access Control (MAC) address of the interface).

As for claim 11, Cox discloses a method (Title: method), further comprising enabling the interface of the sub-element for network element external communication at the earliest when the address for the interface of the sub-element is defined (page 2, paragraph 0021).

As for claim 15, Cox discloses a network element (Figure 1 and page 1, paragraph 0012-0014: Access point 112) comprising: at least one sub-element (Figure 1 and page 1, paragraph 0012: new router 104); a configuring means configured to configure a temporary address for an interface of a sub-element of the at least one sub-element (page 2, paragraph 0017 and 0018: configure address prefix for interface on new router 104) and to define an address for the interface of the sub-element by including an identifier of the network element retrieved by a retrieving means (page 2,

paragraph 0018 and 0019); and the retrieving means configured to retrieve the identifier of the network element (page 2 paragraph 0019: an address prefix is received).

As for claim 16, Cox discloses a network element (Figure 1 and page 1, paragraph 0012-0014: Access point 112), wherein the configuring means is configured to configure a local link layer address (page 1, paragraph 0011: IPv6 Media Access Control (MAC) address of the interface) for the interface of the sub-element (page 1, paragraph 0012: new router 104 communication interface).

As for claim 17, Cox discloses a network element (Figure 1 and page 1, paragraph 0012-0014: Access point 112), wherein the configuring means is configured to configure the temporary address (page 1, paragraph 0011: for IPv6, when no address prefix is available, the router automatically flag that interface as needing a new address prefix) based on hardware location information of the sub-element (page 1, paragraph 0011: MAC address provides the hardware location) in the network element.

As for claim 18, Cox discloses a network element (Figure 1 and page 1, paragraph 0012-0014: Access point 112), wherein the configuring means is configured to configure the temporary address (page 1, paragraph 0011: for IPv6, when no address prefix is available, the router automatically flag that interface as needing a new address prefix) based on a module identifier of the sub-element (page 1, paragraph 0011: existing unique numerical identifier for that interface).

As for claim 22, Cox discloses a network element (Figure 1 and page 1, paragraph 0012-0014: Access point 112), wherein the retrieving means is configured to retrieve the identifier of the network element using the temporary address as a unique address to carry out an automatic address resolution procedure locally in the network element (page 1, paragraph 0011).

As for claim 23, Cox discloses a network element (Figure 1 and page 1, paragraph 0012-0014: Access point 112), wherein the configuring means is configured to configure a network layer address for the interface of the sub-element (page 1, paragraph 0011: IPv6 Media Access Control (MAC) address of the interface).

As for claim 26, Cox discloses a network element (Figure 1 and page 1, paragraph 0012-0014: Access point 112), wherein the link layer address is based on a 48-bit media access control identifier format (Figure 1 and page 1, paragraph 0013: new router 104 couples 109 to an IPv6 link 111 via an Ethernet hub. Hence Ethernet interface is present. Ethernet MAC link layer address is 48-bit in length, therefore 48-bit media access control identifier is present).

As for claim 29, Cox discloses a communication (Abstract: communication links) system (Title: Apparatus) comprising: a logical network (page 1, paragraph 0002: Ethernet Network) comprising at least two network elements (Figure 1 and page 1,

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paragraph 0012-0014: Access Point 113, End point 112), a network element of the at least two network elements comprising at least one sub-element (Figure 1 and page 1, paragraph 0012: new router 104); a configuring means configured to configure a temporary address for an interface of a sub-element of the at least one sub-element (page 2, paragraph 0017 and 0018: configure address prefix for interface on new router 104) and to define an address for the interface of the sub-element by including an identifier of the network element retrieved by a retrieving means (page 2, paragraph 0018 and 0019); the retrieving means adapted to retrieve the identifier of the network element (page 2, paragraph 0019: an address prefix is received).

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 5-7, 10, 12, 14, 19-21, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cox et al. (US 2003/0099246 A1) in view of Thubert et al. (US 7,333,461 B2).

As for claim 5, Cox discloses a method (Cox: Title: method) with a sub-element (Cox: Figure 1 and page 1, paragraph 0012: new router 104). Cox discloses the claimed

invention except wherein further comprising providing a control sub-element configured to access the identifier of the network element without a need to communicate with other network elements.

However, Thubert discloses a control sub-element (Thubert: column 7, lines 32-51: mobile router 30 for IPv6 packets with routing resource 52) configured to access the identifier of the network element without a need to communicate with other network elements (Thubert: column 7, lines 32-51: The routing resource 52 also includes a source routing resource 62 configured for routing a packet based on a detected type 2 routing header, and based on retrieving routing table entries 64 from a routing table 65) for the purpose of enables mobile routers to establish mobile networks in a manner that maintains privacy and security for the IP addresses and IP address prefixes of the mobile networks (Thubert: column 3, lines 41-44).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to implement a control sub-element configured to access the identifier of the network element without a need to communicate with other network elements as taught by Thubert in Cox for the purpose of enables mobile routers to establish mobile networks in a manner that maintains privacy and security for the IP addresses and IP address prefixes of the mobile networks.

As for claim 6, Cox discloses a method (Cox: Title: method) with a sub-element (Cox: Figure 1 and page 1, paragraph 0012: new router 104). Cox discloses the claimed

invention except wherein further comprising storing the identifier of the network element in a memory of the control sub-element.

However, Thubert discloses storing the identifier of the network element in a memory of the control sub-element (Thubert: column 7, lines 52-58) for the purpose of storage means for routing table entries for routing table (Thubert: column 7, lines 49-51).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to implement storing the identifier of the network element in a memory of the control sub-element as taught by Thubert in Cox for the purpose of storage means for routing table entries for routing table.

As for claim 7, Cox discloses a method (Cox: Title: method) with a sub-element (Cox: Figure 1 and page 1, paragraph 0012: new router 104). Cox discloses the claimed invention except wherein the retrieving step comprises retrieving the identifier of the network element from the control sub-element.

However, Thubert discloses wherein the retrieving step comprises retrieving the identifier of the network element from the control sub-element (Thubert: column 7, lines 49-51) for the purpose of routes the packet based on detecting a routing table entry that specifies the local router prefix (Thubert: column 7, lines 30-31).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to implement retrieving the identifier of the network element

from the control sub-element as taught by Thubert in Cox for the purpose of routes the packet based on detecting a routing table entry that specifies the local router prefix.

As for claim 10, Cox discloses a method (Cox: Title: method) with a network element (Cox: Figure 1 and page 1, paragraph 0014: End Point 112). Cox discloses the claimed invention except wherein further comprising blocking, inside a network element, all data packets lacking the identifier of the network element.

However, Thubert discloses wherein blocking, inside a network element, all data packets lacking the identifier of the network element (Thubert: Figure 6B, column 11, lines 63-67 and column 12, lines 1-12: at router 30, if the next hop address does not specify an address prefix in the table entry, the packet is dropped) for the purpose of maintain security for intermediate routers (Thubert: column 3, lines 39-40).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to configure blocking, inside a network element, all data packets lacking the identifier of the network element as taught by Thubert in Cox for the purpose of maintain security for intermediate routers.

As for claim 12, Cox discloses a method (Cox: Title: method) with the interface of a sub-element (Cox: Figure 1 and page 1, paragraph 0012: new router 104 with interface). Cox discloses the claimed invention except wherein retrieving a network portion identifying the logical network and continuing the address configuration by including the network portion to the address of the interface of the sub-element.

However, Thubert discloses wherein retrieving a network portion identifying the logical network and continuing the address configuration by including the network portion to the address (Thubert: column 8, lines 21-34) of the interface of the sub-element (Thubert: Figure 2: router 30 with IP interface) for the purpose of performing router attachment selection and router registration, and generating binding updates (Thubert: column 7, lines 39-40).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to configure retrieving a network portion identifying the logical network and continuing the address configuration by including the network portion to the address of the interface of the sub-element as taught by Thubert in Cox for the purpose of performing router attachment selection and router registration, and generating binding updates.

As for claim 14, Cox discloses the claimed invention except wherein a computer program comprising program code means for performing any of the steps when program code is run on a computing means.

However, Thubert discloses wherein a computer program comprising program code means for performing any of the steps when program code is run on a computing means (Thubert: column 10, lines 28-35) for the purpose of enablement.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to implement a program comprising program code means for

performing any of the steps when program code is run on a computing means as taught by Thubert in Cox for the purpose of enablement.

As for claim 19, Cox discloses a network element (Cox: Figure 1 and page 1, paragraph 0012-0014: Access point 112). Cox discloses the claimed invention except wherein further comprising a control sub-element configured to access the identifier of the network element without a need to communicate with other network elements.

However, Thubert discloses a control sub-element (Thubert: column 7, lines 32-51: mobile router 30 for IPv6 packets with routing resource 52) configured to access the identifier of the network element without a need to communicate with other network elements (Thubert: column 7, lines 32-51: The routing resource 52 also includes a source routing resource 62 configured for routing a packet based on a detected type 2 routing header, and based on retrieving routing table entries 64 from a routing table 65) for the purpose of enables mobile routers to establish mobile networks in a manner that maintains privacy and security for the IP addresses and IP address prefixes of the mobile networks (Thubert: column 3, lines 41-44).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to implement a control sub-element configured to access the identifier of the network element without a need to communicate with other network elements as taught by Thubert in Cox for the purpose of enables mobile routers to establish mobile networks in a manner that maintains privacy and security for the IP addresses and IP address prefixes of the mobile networks.

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As for claim 20, Cox discloses a network element (Cox: Figure 1 and page 1, paragraph 0012-0014: Access point 112) and the control sub-element (Cox: Figure 1 and page 1, paragraph 0012: new router 104). Cox discloses the claimed invention except wherein further comprising a memory configured to store the identifier of the network element.

However, Thubert discloses a memory configured to store the identifier of the network element (Thubert: column 7, lines 52-58) for the purpose of storage means for routing tables entries for routing table (Thubert: column 7, lines 49-51).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to implement a memory configured to store the identifier of the network element as taught by Thubert in Cox for the purpose of storage means for routing tables entries for routing table.

As for claim 21, Cox discloses a network element (Cox: Figure 1 and page 1, paragraph 0012-0014: Access point 112). Cox discloses the claimed invention except wherein the retrieving means is configured to retrieve the identifier of the network element from the control sub-element.

However, Thubert discloses wherein the retrieving means is configured to retrieve the identifier of the network element from the control sub-element (Thubert: column 7, lines 49-51) for the purpose of routes the packet based on detecting a routing table entry that specifies the local router prefix (Thubert: column 7, lines 30-31).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to implement retrieving means is configured to retrieve the identifier of the network element from the control sub-element as taught by Thubert in Cox for the purpose of routes the packet based on detecting a routing table entry that specifies the local router prefix.

As for claim 24, Cox discloses a network element (Cox: Figure 1 and page 1, paragraph 0012-0014: Access point 112). Cox discloses the claimed invention except further comprising blocking means configured to block, inside the network element, all data packets lacking the identifier of the network element.

However, Thubert discloses wherein blocking, inside a network element, all data packets lacking the identifier of the network element (Thubert: Figure 6B, column 11, lines 63-67 and column 12, lines 1-12: at router 30, if the next hop address does not specify an address prefix in the table entry, the packet is dropped) for the purpose of maintain security for intermediate routers (Thubert: column 3, lines 39-40).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to configure blocking, inside a network element, all data packets lacking the identifier of the network element as taught by Thubert in Cox for the purpose of maintain security for intermediate routers.

As for claim 25, Cox discloses a network element (Cox: Figure 1 and page 1, paragraph 0012-0014: Access point 112). Cox discloses the claimed invention except

wherein the retrieving means is further configured to retrieve a network portion identifying a logical network and continuing an address configuration of the configuring means by including the network portion to the address of the interface of the sub-element.

However, Thubert discloses wherein to retrieve a network portion identifying a logical network and continuing an address configuration of the configuring means by including the network portion to the address (Thubert: column 8, lines 21-34) of the interface of the sub-element (Thubert: Figure 2: router 30 with IP interface) for the purpose of performing router attachment selection and router registration, and generating binding updates (Thubert: column 7, lines 39-40).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to configure retrieving a network portion identifying the logical network and continuing the address configuration by including the network portion to the address of the interface of the sub-element as taught by Thubert in Cox for the purpose of performing router attachment selection and router registration, and generating binding updates.

5. Claims 13 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cox et al. (US 2003/0099246 A1) in view of Smith et al. (US 2004/0198413 A1).

As for claim 13, Cox discloses a method (Cox: Title: method), wherein the providing step comprises providing a layer 2 switched (Cox: page 1, paragraph 0011:

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MAC address of interface) local area network (Cox: page 1, paragraph 0002: local area network). Cox discloses the claimed invention except for the at least two transceiver network elements, a transceiver network element of the at least two transceiver network element comprising a control module and at least one other module.

However, Smith discloses a local area network (Smith: page 4, paragraph 0036: local area network) with at least two transceiver network elements, a transceiver network element of the at least two transceiver network element comprising a control module and at least one other module (Smith: Figure 1 and page 2, paragraph 0018) for the purpose of converting packet-switched data transmitted from the GRPS support node to the radio access network through the GPRS support node (Smith: page 2, paragraph 0017).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to configure a layer 2 switched local area network with at least two transceiver network elements, a transceiver network element of the at least two transceiver network element comprising a control module and at least one other module as taught by Smith in Cox for the purpose of converting packet-switched data transmitted from the GRPS support node to the radio access network through the GPRS support node.

As for claim 28, Cox discloses the claimed invention except wherein the network element being a transceiver network element and comprising a control module and at least one other module.

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However, Smith discloses the network element being a transceiver network element and comprising a control module and at least one other module (Smith: Figure 1 and page 2, paragraph 0018) for the purpose of converting packet-switched data transmitted from the GRPS support node to the radio access network through the GPRS support node (Smith: page 2, paragraph 0017).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to configure a network element being a transceiver network element and comprising a control module and at least one other module as taught by Smith in Cox for the purpose of converting packet-switched data transmitted from the GRPS support node to the radio access network through the GPRS support node.

6. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cox et al. (US 2003/0099246 A1) in view of Thubert et al. (US 2004/0179508 A1).

As for claim 27, Cox discloses a network element (Cox: Figure 1 and page 1, paragraph 0012-0014: Access point 112), wherein the network layer address is one of a link-local Internet Protocol version 6 address based on an EUI-64 identifier (Cox: page 1 and paragraph 0011). Cox discloses the claimed invention except for an Internet Protocol version 4 address using a dynamic host configuration protocol.

However, Thubert discloses an Internet Protocol version 4 address using a dynamic host configuration protocol (Thubert: page 4, paragraph 0042) for the purpose

of enable nodes in the private networks to be addressable in the public IPv4 network (Thubert: page 4, paragraph 0042).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to configure an Internet Protocol version 4 address using a dynamic host configuration protocol as taught by Thubert in Cox for the purpose of enable nodes in the private networks to be addressable in the public IPv4 network.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SIMON KING whose telephone number is (571)270-1950. The examiner can normally be reached on Monday to Thursday,7:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, LEN TRAN can be reached on (571)272-1184. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

March 9, 2008 /Simon King/

Examiner, Art Unit 4183

/Len Tran/ Supervisory Patent Examiner, Art Unit 4183